Amendments to the Claims:

1. **(currently amended)** A lift truck, load stabilization system for controlling ~~the tilt angle of~~ a ~~lifting~~ lift mast tilt angle, the mast having a cargo support mounted to the mast and a tilt actuator for adjusting the mast tilt angle relative to the lift truck ~~frame~~, the system comprising:
   a. an acceleration sensor mounted to the lift truck for sensing an ~~the~~ angular direction of a resultant of ~~the~~ forces of gravitational acceleration and vehicle travel acceleration; and
   b. a negative feedback control system having
      i. a feedback element input connected to the acceleration sensor for feedback of said resultant angular direction,
      ii. a reference input storage for storing a value of angular direction representing the resultant angular direction of acceleration when the lift truck is at rest and the cargo support is horizontal; and
      iii. an output connected to control said actuator for controllably varying the mast tilt angle and bringing the resultant angular direction into alignment with the stored reference angular direction.

2. **(original)** A lift truck system in accordance with claim 1 wherein the tilt actuator includes at least one double acting hydraulic cylinder actuator hydraulically connected to a bidirectional, proportional, hydraulic valve for controlling the hydraulic fluid flow to

the tilt actuator, the hydraulic valve having a control input linked to the output of the negative feedback control system for controlling the actuator to tilt the mast to a tilt angle within a smoothly continuous tilt angle range.

3. **(withdrawn)** A lift truck system in accordance with claim 2 wherein the control system comprises an analog proportional controller.

4. **(original)** A lift truck system in accordance with claim 2 wherein the control system comprises is a PID controller.

5. **(original)** A lift truck system in accordance with claim 2 wherein the hydraulic valve is electrically actuated.

6. **(withdrawn)** A method for adjusting the tilt angle of the load supporting surface of a lift truck, the method comprising: adjusting the tilt angle of the load supporting surface during lift truck operation to maintain the load supporting surface substantially perpendicular to the angular direction of the resultant of gravitational and travel acceleration.

7. **(withdrawn)** A method for adjusting the tilt angle of the load supporting surface of a lift truck, the method comprising:

a. storing the angular direction of gravitational acceleration upon the load supporting surface when the lift truck is at rest and the load supporting surface is substantially horizontal;

b. sensing the resultant angular direction of gravitational and travel acceleration during lift truck operation; and

c. tilting the load supporting surface through the angular difference of said angular directions to align the load supporting surface substantially perpendicular to the resultant angular direction.

8. **(withdrawn)** A method in accordance with claim 7 wherein the storing step is performed by positioning the lift truck at rest with the load supporting surface substantially horizontal and storing a sensed angular direction of gravitational force.